

REMARKS

Claims 1-4, 6-8, 10-25, 27, and 29-72 are pending in the subject application. In the present Office Action all claims stand rejected under 35 USC § 103(a) as being obvious over Wende, et al., *J. Am. Chem. Soc.*, **2001**, 123, 11490-11491 ("Wende") or Curran et al., *Synlett*, **2001**, 9, 1488-1496 ("Curran"). Applicants traverse these rejections for the reasons set forth herein.

Claims 1 and 22 have been amended herein to recite the phrase "in the presence of the solid adsorbant" in the body of the claims. The phrase is originally recited in the preamble of each claim and therefore does not present new subject matter. Since limitations in the preamble are not necessarily read into the claims, this amendment clarifies that the chemical reaction is conducted in the presence of the solid adsorbant. Entry is respectfully requested.

General Comments

First, Applicants note that the subject application has been pending since 2003 and has been subject to five (5) new grounds of rejections in five different non-final Office Actions (see Office Actions of 7/17/2006; 12/12/2006; 10/16/2007; 7/29/2008; and 6/24/2009) after Applicants had overcome the Office's previous grounds for rejection. Applicants remind the Office of its policy against piecemeal examination (MPEP §707.07(g)) and assumes that the present Action presents the entirety of the Office's remaining concerns about patentability of the claimed subject matter.

Further, it is noted that the Office Action fails to specifically address the expressly recited features of the pending dependent claims. The subject application contains numerous dependent claims which further describe and limit the claimed invention. Under the Office's policy of compact prosecution, each claim should be reviewed for compliance with every statutory requirement for patentability in the initial review of the application, even if one or more claims are found to be deficient with respect to some statutory requirement. (MPEP §707.07(g)). Accordingly, in the event that the Office maintains the rejection of any of the dependent claims, Applicant respectfully requests, in the interests of compact prosecution, that the Office apply art against each feature of each rejected

dependent claim, on the record, and with specificity sufficient to support a *prima facie* case of anticipation or obviousness.

Rejection under 35 U.S.C. § 103(a) over Wende

The Office rejects all pending claims under 35 USC § 103(a) as being obvious over Wende, et al., *J. Am. Chem. Soc.*, **2001**, 123, 11490-11491 ("Wende"). Applicants traverse this rejection for at least the following reasons.

The Office has previously cited Wende as a reference under 35 USC § 102(a) in the Office Action of July 17, 2006. In response, Applicants established by inventor declaration (see Declaration of Prof. John A. Gladysz filed September 15, 2006) that the Wende reference represents Applicants' own work published less than a year before the priority date of the subject application and therefore cannot be prior art. Thus, the current rejection using Wende under 35 USC § 103(a) is improper and Applicants respectfully request its withdrawal.

Rejection under 35 U.S.C. § 103(a) over Curran

The Office rejects all pending claims under 35 U.S.C. § 103(a) as being unpatentable over Curran et al., *Synlett*, **2001**, 9, 1488-1496 ("Curran"). Applicants traverse this rejection for at least the reasons set forth herein.

Curran describes fluorous solid-phase extraction techniques where the fluorous reaction products can be separated from organic reaction products by a standard fluorous separation technique. Fluorous solid phase extraction or chromatography is a post-reaction separation technique. That is, after the reaction, the crude reaction mixture is charged onto a column containing fluorous silica gel and eluted with a solvent to separate the fluorous reaction components from the non-fluorous reaction components. (See, for example, Curran at page 1491, right column, third paragraph; or page 1493 at the paragraph spanning the left and right column).

In contrast, the subject application presents methods for conducting a chemical reaction in a non-fluorous medium using at least one chemical reactant and a fluorous compound in the presence of a solid adsorbant containing a fluorous domain. (See for example, claim 1 and 22). In particular, the claims recite "contacting the fluorous

compound and the at least one chemical reactant in the non-fluorous medium and in the presence of the solid adsorbant under conditions that form at least one product.” Curran does not describe, explicitly or inherently, this contacting step and instead merely describes a post-reaction physical separation technique. Consequently, for at least this reason Curran does not describe each and every element of the claims 1 and 22 or the claims dependent therefrom.

Independent claims 45 and 58 describe methods of conducting a chemical reaction which involves the use of the temperature dependent solubility of a fluorous reaction component in the non-fluorous medium. By changes in temperature, the amount of the fluorous reaction component solubilized in the reaction medium or adsorbed on the solid adsorbant is changed. In addition to the issues raise above with respect to claims 1 and 22, Curran does not teach or suggest utilizing changes in temperature to control the amount of fluorous reaction component adsorbed on the solid adsorbant, as recited in claims 45 and 58. Therefore, Curran does not describe each and every element recited in claims 45 and 58 or the claims dependent therefrom.

Curran does not disclose, either explicitly or inherently, conducting a chemical reaction in the presence of a solid adsorbant containing fluorous domains and in a non-fluorous medium. Further, Curran does not disclose controlling the solubility of a fluorous compound in the non-fluorous reaction medium by changes in temperature. Thus, Curran does not teach, either explicitly or inherently, each and every element of the claims of the present disclosure and *prima facie* obviousness cannot be established. Applicants respectfully request the withdrawal of the rejection under 35 USC § 103(a) over Curran.

Status of Pending Related Cases

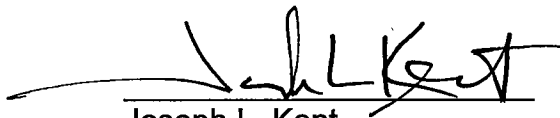
Pending U.S. Application Serial No. 12/082,763, filed April 14, 2008 is related to the subject application. The related application is subject to a non-final Office Action mailed September 29, 2009. No response to the Action has yet been filed.

CONCLUSION

Applicants submit that claims 1-4, 6-8, 10-25, 27, and 29-72 of the subject application recite novel and non-obvious methods of conducting a chemical reaction in a non-fluorous medium using a fluorous compound in the presence of a solid adsorbant containing a fluorous domain. Applicants respectfully submit that all pending claims in the subject application are in condition for allowance. Accordingly, reconsideration of the rejection and issuance of a Notice of Allowance is earnestly solicited.

If the undersigned can be of assistance to the Examiner in addressing issues to advance the application to allowance, please contact the undersigned at the number set forth below.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "J. L. Kent", is written over a horizontal line.

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